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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,346	11/15/2000	Yvan LeClerc	SRI-P4089	6506

7590 03/16/2004  
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EXAMINER

AHMED, SAMIR ANWAR

ART UNIT PAPER NUMBER

2623

DATE MAILED: 03/16/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/714,346

Applicant(s)

LECLERC ET AL.

Examiner

Samir A. Ahmed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-5, and 7- 8 is/are rejected.
- 7) ☒ Claim(s) 3, 6 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2, 5, 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 2, recites, "comparing the mean or median elevation of said coordinate of said three-dimensional models" on lines 2-3. There is no disclosure in the specification of "comparing the mean or median elevation of said coordinate of said three-dimensional models", nor how to perform it. The specification only discloses, "Resampling theory is used to compare the mean or median elevation for each change in the models" (page 42, lines 15-22 and page 55, lines 7-12). There is no recitation that the Resampling theory is used to compare the mean or median elevation of the coordinate of neither the three-dimensional models nor how to perform that comparison.

As to claims 5, 8, refer to claim 2 rejection.

3. Claims 2, 5, 8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 2, recites, "comparing the mean or median elevation of said coordinate of said three-dimensional models" on lines 2-3. As required by 35 U.S.C. 112, first paragraph the specification should include a complete, precise and accurate description of the claimed invention. There is no description in the specification of using the Resampling theory to compare the mean or median elevation of the coordinate of neither the three-dimensional models nor how to perform that comparison.

As to claims 5, 8, refer to claim 2 rejection.

#### ***Claim Objections***

4. Claims 2, 5 and 8 are objected to because of the following informalities: in claim 2, "said coordinate" on line 2 should be changed to – said coordinates-- . Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 4, 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazawa (U.S. Patent 6,501,501).

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As to claim 1, Miyazawa discloses a method for detecting changes in three-dimensional shape (col. 5, lines 64-67), said method comprising the steps of:

a) collecting a plurality of imagery of a scene at different points in time (col. 3, lines 1-10, 53-59);

b) using three-dimensional reconstruction processes to create three-dimensional models of said scene, said three-dimensional models comprising coordinates, said coordinates having elevations [the sequence of images are synthesized to obtain a singular panoramic image (model) of the scene (col. 3, lines 59-63) the image is stored in a three dimensional data base (col. 5, lines 55-60, Figs. 6, 7b and 10,item A), the three dimensional models has coordinates x,y,z (col. 4, lines 8-15), the coordinates has positional data (latitude, longitude and altitude (elevation)); and

c) comparing said three-dimensional models [the 3D models for the same object at different times stored in database are compared (col.4, lines 6-29, col. 5, lines 13-17, Figs. 3 and 6)].

As to claim 4, refer to claim 1 rejection. Miyazawa further discloses a computer-readable medium having stored thereon instructions for causing a computer to implement a process [a software implemented on a computer (col. 5, lines 24-26)].

As to claim 7, refer to claim 1 rejection. Miyazawa further discloses a computer for implementing the method (col. 5, lines 24-25). A computer inherently comprising:

a bus;

a processor coupled to said bus; and

a computer-readable memory unit coupled to said bus.

***Allowable Subject Matter***

7. Claims 3,6, 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claim 3, the limitation "wherein step c) further comprising the steps of: c1) computing a score, said score being an appraisal of the confidence of the accuracy of said three-dimensional model" in combination with other limitations of the claim and base claim are not disclosed or suggested by the prior art of record.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir A. Ahmed whose telephone number is 703-305-9870. The examiner can normally be reached on Mon-Fri 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

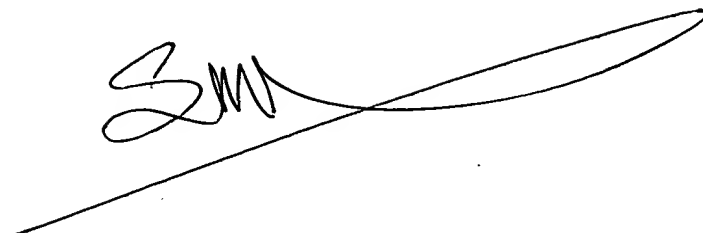
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SA

A handwritten signature in black ink, appearing to be 'SAM', with a long, sweeping horizontal line extending to the right.

**SAMIR AHMED  
PRIMARY EXAMINER**